George Mason University
Graduate School of Education

EDRS 590  C01 Methods of Educational Research
Summer 2004

Instructor:  Dr. Karen Banks
Class Time:  MW 3:50-6:50 pm and F July 9, 16 and 23 3:50-6:50
Location:  Enterprise Hall 279
Office Hours: Before class or by appointment

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Course Description:  Develops skills, insights and understanding of basics to perform research, with emphasis on interpretation and application or research results.  The course critiques research and uses findings in educational settings.

Class Objectives:
Students will be able to:

Share results of current research on educational issues,
Recognize and describe different methods of research, including quantitative and qualitative analyses, and variations within these categories,
Use electronic resources to find research relevant to a selected topic,
Compare uses of research methodology in different settings,
Write a literature review in education of psychology,
Critically evaluate educational research in terms of validity and applicability to their field,
Reflect on uses of research, methodology and current research findings.

Required Texts:


Standards

A. National Board of Professional Teaching Standards:

Proposition 4:  Teachers think systematically about their practice and learn from their experience.

B. National Technology Standards:
Standard IV: Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.

Standard V: Teachers use technology to enhance their productivity and professional practice.

**Learning Outcomes**

A. Students will be able to:
   1. Articulate the role of educational research and systematic evidence in the improvement of teaching.
   2. Use educational research literature as a basis for reflecting on and improving their teaching practice.
   3. Make explicit linkages between research and practice.
   4. Distinguish between the purposes and methods of theoretical, applied, and action research as well as quantitative and qualitative research.
   5. Explain the fundamentals of validity and reliability and articulate the potential threats to validity within various research paradigms.
   6. Critique the quality of research studies within various paradigms.
   7. Describe the purpose and cycle of action research.
   8. Write a review of literature.
   9. Use technology to assist in locating, using, and conducting research.

B. Outcomes and Standards

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<th>NBPTS Propositions</th>
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**Dates:**

**Topics/Assignments**
6/28  Input, Overview of Course
      Begin Journal

6/30  Ch 1 and 2 Mc Research in Education
      Ch 1 & 2 YBR

7/5   Holiday-NO CLASS

7/7   Field Trip to Johnson Ctr. Library—meet in library 2nd floor
      Collect 3 research articles to share in class

7/9   Ch 3 and 4 Mc Reviewing Research
      JOURNAL CHECK
      In-class activity reviewing research

7/12  Ch 13 Mc Critical Ingredients of Research
      Critique research articles from the library visit
      Ch 8 YBR Research Questions

7/14  Ch 5 and 11 Mc Subjects/Participants
      Qualitative Design
      Ch 10 YBR Planning a Study
      Begin to form research question for project
      PROJECT DUE 7-10 websites-annotated

7/16  Ch 6 and 12 Foundations of Measurement
      Analyzing Results
      Ch 12 YBR Verifying results
      JOURNAL CHECK
      PROJECT DUE Summary of 3 research articles

7/19  Ch 7 and 8 Mc Types of Ed Measurements
      Non-experimental Quantitative Design

7/21  Ch 9 and 10 Mc Experimental and Nonexperimental design
      Ch 12YBR
      PROJECT DUE Glossary

7/23  No reading from texts-work on project
      FINAL JOURNAL CHECK

7/26  PROJECT DUE Research Plan
      Begin class presentations of Projects

7/28  Continue Class Presentations of Projects
      Last Class

Grades:

Participation/Journal
Journal should include reflections of class discussions, research reviewed and personal application of research to fields of interest. Turn in typed entries at journal checks scheduled through class schedule (10 total due, minimum of one page in length). Participation includes involvement in class discussion, sharing research articles for analysis and in class activities.

20 pts.

7-10 Annotated Websites and criteria for selection, that are useful for research around a selected topic. Criteria should include a definition of the criteria, and a scale for rating the criteria. Apply the criteria to each website and give the website an overall rating.

20 pts.

Summary of 3 research articles to include: state the type of research, state the purpose of the research, describe the sample and procedure/methods, summarize the results, author’s conclusions and comment critically on the research (your insights).

20 pts.

Glossary of significant terms related to research Minimum of 20, include term and a definition in your own words.

10 pts.

Research plan project to include:
- Literature review (include a minimum of 5 references to support your research)
- Purpose/Hypotheses
- Proposed data collection (include a proposed sample or description of tools)
- Proposed data analysis (set up a table, graph, or chart to present pilot data)
- Insights/Revisions (your insights)

30 pts.

100%-93%  A
92%-85%    B
84%-77%    C
76%-70%    D
<69%        F